

29. A process according to claim 1, wherein said catalyst has a silicon/aluminum atomic ratio within the range of 300-500.

30. A process for cracking an olefin-rich hydrocarbon feedstock which is selective towards propylene in the effluent, the process comprising contacting a hydrocarbon feedstock containing olefins having a first composition of at least one olefinic component with a crystalline silicate catalyst selected from the group consisting of (ZSM-5) and (silicalite) having a silicon/aluminum atomic ratio of from 180 to 1000 to produce an effluent having a second composition of at least one olefinic component, the feedstock contacting the catalyst at an inlet temperature of from 500 to 600°C and being passed over the catalyst at an LHSV of from 10 to 30h⁻¹, the feedstock and the effluent having substantially the same olefin content by weight therein, and the effluent having a higher propylene content than the feedstock.

31. A process according to claim 30, wherein said catalyst has a silicon/aluminum atomic ratio of at least 300.

32. A process according to claim 30, wherein said catalyst has a silicon/aluminum atomic ratio within the range of 300-500.

33. A process according to claim 31, wherein said catalyst is monoclinic silicalite.